

REMARKS

Reconsideration of the instant application is respectfully requested. The present submission is responsive to the Final Office Action of July 10, 2003, in which claims 1-9 and 18 of group I are presently pending. Of the claims under consideration, claims 1 and 3 remain rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 6,033,939 to Agarwala, et al. (Agarwala), in view of the publication entitled *Electronic Packaging and Interconnection Handbook*, by Charles A. Harper (Harper). In addition, claims 2, 4 and 6 remain rejected under 35 U.S.C. §103(a), as being unpatentable over Agarwala, in view of Harper, and in further view of U.S. Patent 6,111,301 to Stamper. Claim 5 remains rejected under 35 U.S.C. §103(a), as being unpatentable over Agarwala, in view of Harper, and in further view of U.S. Patent 6,300,233 to Lee, et al. (Lee). Finally, claims 7-9 and 18 remain rejected under 35 U.S.C. §103(a), as being unpatentable over Agarwala, in view of Harper, in further view of Stamper, and in further view of U.S. Patent 5,590,460 to DiStefano, et al. (DiStefano). For the following reasons, however, it is respectfully submitted that the application is still in condition for allowance.

Claim 1 has been amended as indicated above to more particularly point out that the organic material encapsulated underneath the conductive layer is also in contact with the conductive layer. In the pending application, the Examiner has equated the BLM pads 10 of Agarwala to the conductive layer 30 of the presently claimed fuse structure. The Applicants continue to maintain that the BLM pads 10 of Agarwala are not part of the fuse structure disclosed therein, as is set forth in detail in the Applicants' response of May 2, 2003. However, in view of the language of amended claim 1, even if the BLM pads 10 could be considered as part of the fuse structure, they are still not in contact with the organic material (element 5) in Agarwala, as is plainly evident from Figure 4 of Agarwala. Accordingly, the present amendment overcomes the rejections to claim 1 and each of the claims dependent therefrom.

Notwithstanding the above reasoning, the Applicants further point out that claim 1 also recites "said conductive layer *completing a conductive path between wiring segments included in a wiring layer...*" (emphasis added). In this regard, the Examiner has not indicated where this feature is taught or suggested in Agarwala. Again, conductor 10 is a bond pad that only completes a conductive path between solder ball 11 and via 9. However, the solder ball and via are not wiring segments in a wiring layer, as is provided for in claims 1-9. As such, the rejections to claims 1-9 are further traversed on this ground.

Finally, the Applicants maintain the position (as to claim 18) that neither Agarwala nor DiStefano teach the use of a via as part of the fuse structure itself, as is required by claim 18. In response to this argument, the Examiner simply states on page 8 of the Final Office Action that "Agarwala does disclose a pair of vias (For Example: See Figure 4)..." However, this response does not state that the disclosed vias in Agarwala are part of the fuse structure itself. Therefore, in order to properly maintain at least a *prima facie* §103 rejection of claim 18, the Examiner would necessarily have to take the position that everything shown in Figure 4 of Agarwala is part of the fuse structure thereof.

One skilled in the semiconductor arts is certainly well aware that a cross-sectional view of semiconductor structure (including fuseable links) could also illustrate other features of the device, such as back end of line interconnect materials, for example. Thus, the fact that Agarwala discloses vias (which are present in practically all semiconductor devices having multiple wiring levels) does not mean that these vias are part of the fuse itself. In fact, that is not the case in the Agarwala reference, in which the fuse structure only includes the fuse material 5 that interconnects lines 1. Any other interpretation is contrary to the teachings of Agarwala, as well as to the knowledge of one skilled in the art. Accordingly, the Applicants respectfully request the Examiner reconsider and withdraw the present rejection as to claim 18.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,  
TIMOTHY J. DALTON, ET AL.

CANTOR COLBURN LLP  
Applicants' Attorneys

By 

Sean F. Sullivan  
Registration No. 38,328  
Customer No. 29371

Date: August 29, 2003  
Address: 55 Griffin Road South, Bloomfield, CT 06002  
Telephone: (860) 286-2929

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